49. **(Twice amended)** A method for promoting survival of mammalian neuronal cells responsive to *hedgehog* induction, comprising treating the [cell] cells with an effective amount of a *hedgehog* polypeptide, thereby increasing the rate of survival of the neuronal cells.

50. **(Twice amended)** A method for promoting growth of mammalian neuronal stem cells, comprising treating the cells with an effective amount of a *hedgehog* polypeptide to increase the rate of growth of the neuronal stem cells.

♦ Please cancel claims 55-68.

69. **(Twice amended)** The method of any one of claims 1, 49, or 50[, 56 or 59], wherein said *hedgehog* protein is administered in combination with one or more other neurotrophic factors.

♦ Please cancel claims 71-75.

76. **(Amended)** The method of claim 1, wherein said neuronal cells [is a] are neural progenitor cells.

77. **(Amended)** The method of claim 1, wherein said neuronal cells differentiate[s] into [a] cells having a particular neural phenotype, such as a neuron or a glia.

78. **(Amended)** The method of claim 1, wherein said neuronal cells [is] are in the central nervous system or the peripheral nervous system.

82. **(Twice amended)** The method of claim 1, wherein said *hedgehog* polypeptide comprises an amino acid sequence identical [or homologous] with all or a portion of an amino acid sequence designated in one of SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, or SEQ ID NO: 34.

83. **(Twice amended)** The method of any one of claims 1, 49, or 50, [56 or 59,] wherein said *hedgehog* polypeptide has an amino acid sequence which is encoded by a nucleic acid which hybridizes under highly stringent conditions to a nucleic acid sequence selected from the group